# TR-1000



#### **Specifications**

Circuit:

10 Transistor Superheterodyne

Frequency Coverage:

MW 530~1,605 Kc (566~187 m)

SW<sub>1</sub> 1.7~4 Mc (176.5~75 m)

SW<sub>2</sub> 4~9.8 Mc (75~30.6 m)

SW<sub>3</sub> 9.8~22 Mc (30.6~13.6 m)

MW Built-in Ferrite Bar Antenna Antenna System:

SW Built-in Telescopic Antenna

Jack for External Antenna

Intermediate Frequency: 455 Kc

MW 25.5 dB/m  $(19\mu V/m)$ 

Maximum Sensitivity: (at 50 mW output with 6 dB S/N)

 $SW_1$  4.5 dB (1.7 $\mu$ V)  $SW_2$  3.5 dB (1.5 $\mu$ V)

 $SW_3$  3 dB (1.4 $\mu$ V)

Selectivity:

40 dB at 10 Kc off resonance, at 1,400 Kc

Output Power: 820 mW (undistorted)

1,300 mW ( maximum )

Current Drain:

 $20\ \text{mA}$  at zero signal,  $245\ \text{mA}$  at  $820\ \text{mW}$  output

Speaker:

Oval Type,  $4 \times 6''$  (10imes15 cm), PM dynamic,  $8\,\Omega$ 

Power Source:

Four "D" Size Flashlight Batteries, 6V in total, or House Current by

using SONY AC Power Adapter

Dimensions:

 $10-3/8 \text{ (W)} \times 8-9/16 \text{ (H)} \times 4-1/16'' \text{ (D)}$ 

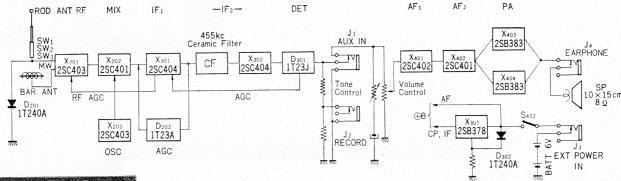
 $(264 \times 218 \times 103 \text{ mm})$ 

Weight:

5 lbs. 8 ozs. (2.5 Kgs.) with Batteries

SERVICING GUID

#### Block Diagram



#### Removal of Chassis

- (1) Remove the two Back Cover Holding Screws and open the Back Cover.
- (2) Remove the Knobs by pulling them out:
- (3) Remove the Power ON/OFF Switch Button by pulling it up.
- (4) Remove the three Jacks by removing the corresponding Nuts from the Cabinet
- (5) Unsolder the two leads at the speaker terminals.
- (6) Remove the five Nuts marked with  $\triangle$  shown in Fig. 1.
- (7) Remove the Chassis from the Cabinet gently taking care not to catch the Power ON/OFF Switch to the Cabinet.

#### Removal of RF Circuit Board

- (1) Unsolder the Braided Wire (marked with  $\triangle$  shown in Fig. 1) and the ground terminal of the Tuning Capacitor at the RF Circuit Board.
- (2) Remove the five Screws marked with  $\square$  shown in Fig. 1.
- (3) Remove the RF Circuit Board from the Chassis gently taking care not to cut the leads.

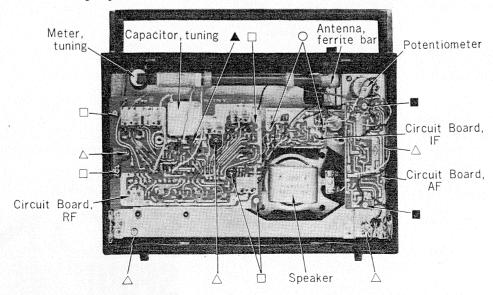
#### Removal of IF Circuit Board

- (1) Remove the two Screws marked with  $\bigcirc$  shown in Fig. 1.
- (2) Remove the IF Circuit Board from the Chassis gently taking care not to cut the leads.

  If it is necessary to remove the IF Circuit Board completely from the Chassis, unsolder all the leads on the IF Circuit Board.

#### Removal of AF Circuit Board

- (1) Remove the two Screws marked with shown in Fig. 1.
- (2) Unsolder all the leads going from it to other points on the AF Circuit Board.



(Fig. 1)

#### Frequency Coverage and Tracking Adjustment

#### Preparation for Adjustments

☆ Receiver to be adjusted

Power Source Voltage:

Keep 6 Volts during the adjustments.

Volume Control Setting:

Set at mechanical 80% position.

Tone Control Setting:

Turn clockwise to the full.

Fine Tuning Capacitor Setting:

Set the slit mark on the Fine Tuning Knob in the horizontal direction.

All Trimmer Capacitor except SW1 Antenna Trimmer Capacitor Setting:

Set at mechanical mid position. (Set the SW1 Antenna Trimmer Capacitor at zero capacitance position when SW1 Tracking Adjustment is performed.)

☆ Signal Source:

Use a SSG (Standard Signal Generator) which can deliver RF signals

modulated at 30% with  $1,000 \, \text{c/s}$ .

☆ Load for Output:

Connect an  $8\Omega$  resistor instead of speaker.

☆ Output Meter:

Connect across the load resistor  $8\Omega$ .

(VTVM can be used also.)

☆ Rated Output:

50 mW (0.63 V across the  $8\Omega$  resistor)

☆ Antenna:

Use a Loop Antenna at MW Band Adjustment. (Use a Dummy Antenna shown in Fig. 2 after pulling out the Pin Connector attached to the lead coming from the Telescopic Antenna on the RF Circuit Board at SW Band Adjustments.)

#### MW Band

#### a) Frequency Coverage Adjustment

(1) Set the Band Setting Switch to MW.

(2) Set the Tuning Capacitor at the maximum capacitance position by turning the Tuning Knob of the Receiver counter-clockwise to the full.

SSG — Receiver

(3) Deliver a 520 Kc signal from the SSG.

(Fig. 2)

- (4) Adjust the core of the MW OSC Coil ( $L_{209}$ ) to tune to the signal.
- (5) Set the Tuning Capacitor at the minimum capacitance position by turning the Tuning Knob of the Receiver clockwise to the full.
- (6) Deliver a 1,680 Kc signal from the SSG.
- (7) Adjust the MW OSC Trimmer Capacitor  $(C_{2-9})$  to tune to the signal.
- (8) Repeat the above procedures (2 $\sim$ 7) until the frequency range between 520 Kc and 1,680 Kc is fully covered.

#### b) Tracking Adjustment

- (1) Deliver a 620 Kc signal from the SSG.
- (2) Tune to the signal by turning the Tuning Knob of the Receiver.
- (3) Adjust the position of the MW ANT Coil ( $L_{201}$ ) along the Ferrite Bar and the core of the MW RF Coil ( $L_{205}$ ) in turn to obtain the maximum output.
- (4) Deliver a 1,400 Kc signal from the SSG.
- (5) Tune to the signal by turning the Tuning Knob of the Receiver.
- (6) Adjust the MW ANT Trimmer Capacitor  $(C_{2-1})$  and the MW RF Trimmer Capacitor  $(C_{2-5})$  in turn to obtain the maximum output.
- (7) Repeat the above procedures  $(1 \sim 6)$  until the maximum output is obtained.

#### SW1 Band

#### a) Frequency Coverage Adjustment

- (1) Set the Band Setting Switch to SW<sub>1</sub>.
- (2) Set the Tuning Capacitor at the maximum capacitance position by turning the Tuning Knob of the Receiver counter-clockwise to the full.
- (3) Deliver a 1.65 Mc signal from the SSG.
- (4) Adjust the core of the  $SW_1$  OSC Coil ( $L_{210}$ ) to tune to the signal.
- (5) Set the Tuning Capacitor at the minimum capacitance position by turning the Tuning Knob of the Receiver clockwise to the full.
- (6) Deliver a 4.2 Mc signal from the SSG.
- (7) Adjust the SW $_1$  OSC Trimmer Capacitor ( $C_{2-10}$ ) to tune to the signal.
- (8) Repeat the above procedures (2 $\sim$ 7) until the frequency range between 1.65 Mc and 4.2 Mc is fully covered.

#### b) Tracking Adjustment

- (1) Deliver a 1.65 Mc signal from the SSG.
- (2) Tune to the signal by turning the Tuning Knob of the Receiver.
- (3) Adjust the core of the SW<sub>1</sub> ANT Coil ( $L_{202}$ ) and the core of the SW<sub>1</sub> RF Coil ( $L_{206}$ ) in turn to obtain the maximum output.
- (4) Deliver 4.2 Mc signal from the SSG.
- (5) Tune to the signal by turning the Tuning Knob of the Receiver.
- (6) Adjust the SW<sub>1</sub> ANT Trimmer Capacitor  $(C_{2-2})$  and the SW<sub>1</sub> RF Trimmer Capacitor  $(C_{2-6})$  in turn to obtain the maximum output.
- (7) Repeat the above procedures  $(1 \sim 6)$  until the maximum output is obtained.

#### SW2 Band

#### a) Frequency Coverage Adjustment

- (1) Set the Band Setting Switch to SW<sub>2</sub>.
- (2) Set the Tuning Capacitor at the maximum capacitance position by turning the Tuning Knob of the Receiver counter-clockwise to the full.
- (3) Deliver a 3.9 Mc signal from the SSG.
- (4) Adjust the core of the  $SW_2$  OSC Coil ( $L_{211}$ ) to tune to the signal.
- (5) Set the Tuning Capacitor at the minimum capacitance position by turning the Tuning Knob of the Receiver clockwise to the full.
- (6) Deliver a 10.2 Mc signal from the SSG.
- (7) Adjust the  $SW_2$  OSC Trimmer Capacitor ( $C_{2-11}$ ) to tune to the signal.
- (8) Repeat the above procedures  $(2\sim7)$  until the frequency range between 3.9 Mc and 10.2 Mc is fully covered.

#### b) Tracking Adjustment

- (1) Deliver a 3.9 Mc signal from the SSG.
- (2) Tune to the signal by turning the Tuning Knob of the Receiver.
- (3) Adjust the core of the SW $_2$  ANT Coil ( $L_{203}$ ) and the core of the SW $_2$  RF Coil ( $L_{207}$ ) in turn to obtain the maximum output.
- (4) Deliver a 10.2 Mc signal from the SSG.
- (5) Tune to the signal by turning the Tuning Knob of the Receiver.

- (6) Adjust the SW<sub>2</sub> ANT Trimmer Capacitor ( $C_{2-3}$ ) and the SW<sub>2</sub> RF Trimmer Capacitor ( $C_{2-7}$ ) in turn to obtain the maximum output.
- (7) Repeat the above procedures  $(1 \sim 6)$  until the maximum output is obtained.

#### SW3 Band

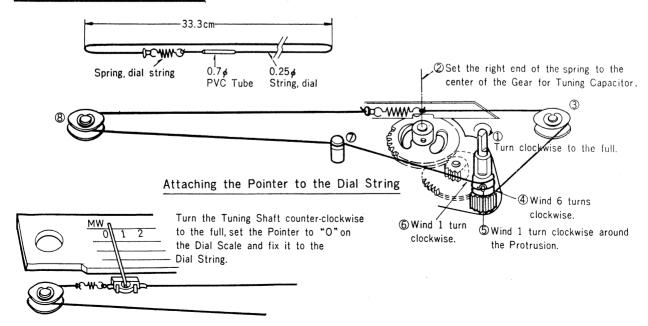
#### a) Frequency Coverage Adjustment

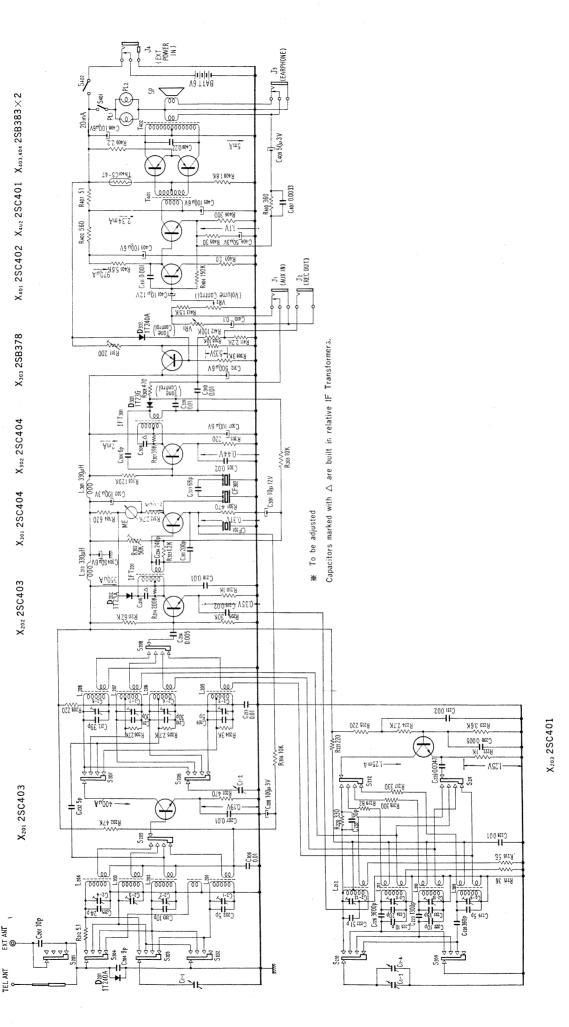
- (1) Set the Band Setting Switch to SW<sub>3</sub>.
- (2) Set the Tuning Capacitor at the maximum capacitance position by turning the Tuning Knob of the Receiver counter-clockwise to the full.
- (3) Deliver a 9.5 Mc signal from the SSG.
- (4) Adjust the core of the  $SW_3$  OSC Coil ( $L_{212}$ ) to tune to the signal.
- (5) Set the Tuning Capacitor at the minimum capacitance position by turning the Tuning Knob of the Receiver clockwise to the full.
- (6) Deliver a 22.8 Mc signal from the SSG.
- (7) Adjust the SW $_3$  OSC Trimmer Capacitor (C $_{2-12}$ ) to tune to the signal.
- (8) Repeat the above procedures  $(2\sim7)$  until the frequency range between 9.5 Mc and 22.8 Mc is fully covered.

#### b) Tracking Adjustment

- (1) Deliver a 9.5 Mc signal from the SSG.
- (2) Tune to the signal by turning the Tuning Knob of the Receiver.
- (3) Adjust the core of the SW<sub>3</sub> ANT Coil ( $L_{204}$ ) and the core of the SW<sub>3</sub> RF Coil ( $L_{208}$ ) in turn to obtain the maximum output.
- (4) Deliver a 22.8 Mc signal from the SSG.
- (5) Tune to the signal by turning the Tuning Knob of the Receiver.
- (6) Adjust the SW $_3$  ANT Trimmer Capacitor ( $C_{2-4}$ ) and the SW $_3$  RF Trimmer Capacitor ( $C_{2-8}$ ) in turn to obtain the maximum output.
- (7) Repeat the above procedures  $(1 \sim 6)$  until the maximum output is obtained.

#### To String the Dial Cord



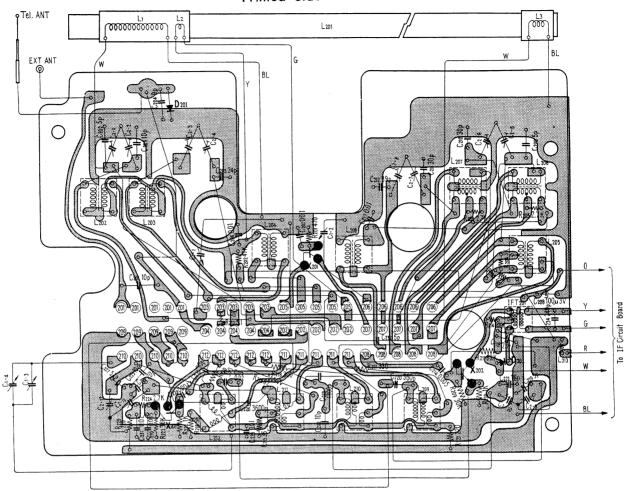


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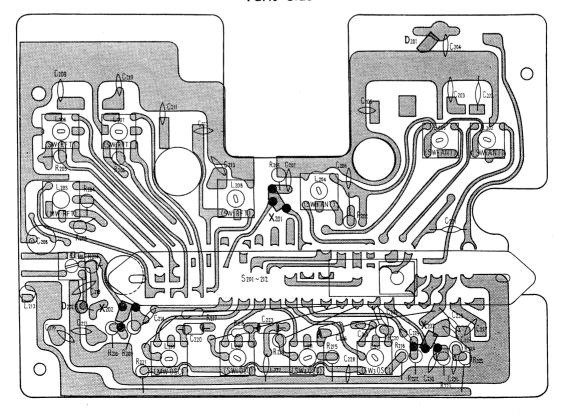
#### Mounting Diagram

#### RF Section

- Printed Side -



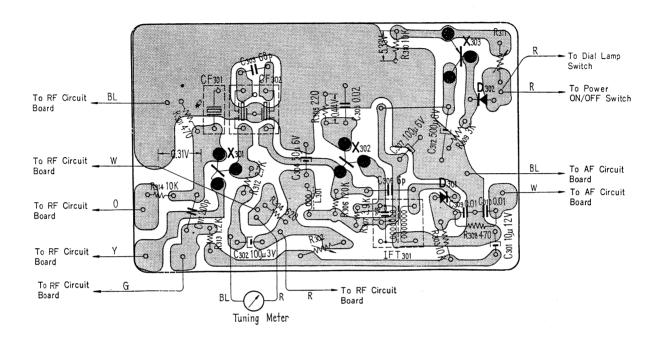
—Parts Side—



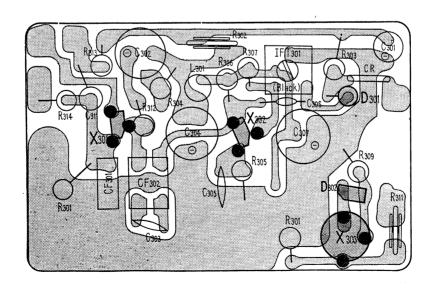
#### Mounting Diagram

#### IF Section

#### -Parts Side -



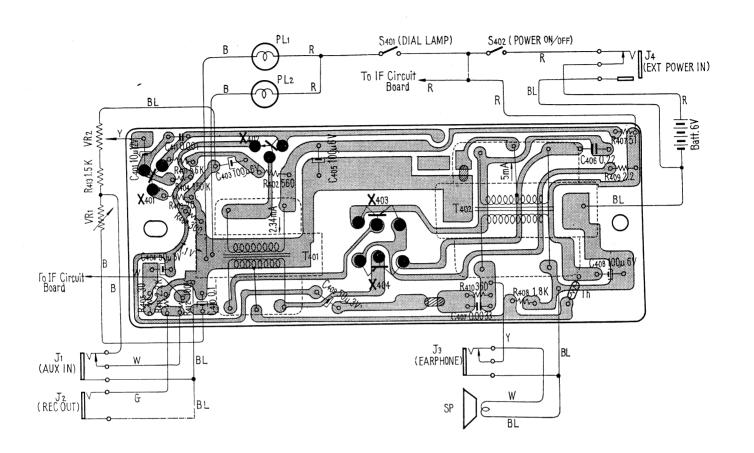
#### -Parts Side -



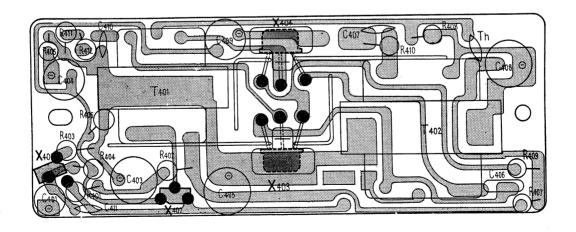
#### Mounting Diagram

#### AF Section

#### - Printed Side -



-Parts Side-



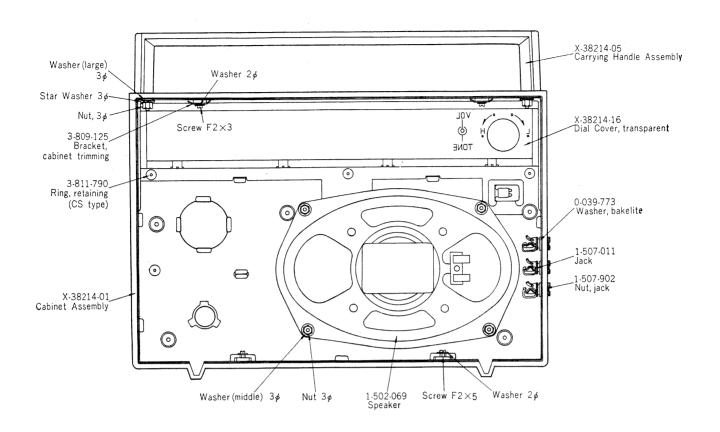
#### Electrical Parts List

Part No.	Symbol	Description	Part No.	Symbol	Description
1-501-007-01	Tel. ANT	Antenna, telescopic			Resistor
1-507-036-02	Ext. ANT	Jack, external antenna	1 001 750 11	VR <sub>1</sub>	Tone Control, $5$ K $\Omega$
1-401-277-12	L <sub>201</sub>	Coil, MW ferrite bar antenna	1-221-752-11	VR <sub>2</sub>	Volume Control, 5K $\Omega$
-274-11	L <sub>202</sub>	Coil, SW <sub>1</sub> antenna	1-240-465-11	R <sub>201</sub>	470Ω ½W Carbon
-27 <i>5</i> -11	L <sub>203</sub>	Coil, SW <sub>2</sub> antenna	-513-11	R <sub>202</sub>	47K Ω // //
1-425-233-11	L <sub>204</sub>	Coil, SW <sub>3</sub> antenna	1-242-697-11	R <sub>203</sub>	10KΩ // //
-232-11	L <sub>205</sub>	Transformer, MW RF	1-240-484-11	R <sub>204</sub>	3K Ω // //
-246-11	L <sub>206</sub>	Transformer, SW <sub>1</sub> RF	-483-11	R <sub>205</sub>	2.7Κ Ω // //
-247-11	L <sub>207</sub>	Transformer, SW <sub>2</sub> RF	-483-11	R <sub>206</sub>	2.7Κ Ω // //
-233-11	L <sub>208</sub>	Transformer, SW <sub>3</sub> RF		R <sub>207</sub>	deleted
1-405-275-11	L <sub>209</sub>	Coil, MW oscillator	1-240-457-11	R <sub>208</sub>	220 Ω ½W Carbon
-276-11	L <sub>210</sub>	Coil, SW <sub>1</sub> oscillator	-508-11	R <sub>209</sub>	30K Ω // //
-277-11	L <sub>211</sub>	Coil, SW <sub>2</sub> oscillator	-473-11	R <sub>210</sub>	1KΩ // //
-278-11	L <sub>212</sub>	Coil, SW <sub>3</sub> oscillator	1-244-516-11	R <sub>211</sub>	62KΩ // //
1-407-050-11	L <sub>213</sub>	Inductor, micro	-418-11	R <sub>212</sub>	5.1 Ω // //
1-403-119-11	IFT <sub>201</sub>	Transformer, IF single tuned		R <sub>213</sub>	deleted
-152-11	IFT <sub>301</sub>	Transformer, IF single tuned	1-240-528-11	R <sub>214</sub>	200KΩ ½W Carbon
-154-11	CF <sub>301</sub>	Filter, ceramic	-438-11	R <sub>215</sub>	36Ω // //
-153-11	CF <sub>302</sub>	Filter, ceramic (with C <sub>303</sub> )	-443-11	R <sub>216</sub>	56 Ω // //
1-423-100-11	T <sub>401</sub>	Transformer, driver	1-244-461-11	R <sub>217</sub>	330 Ω // //
1-427-088-11	T <sub>402</sub>	Transformer, output	-460-11	R <sub>218</sub>	300 Ω // //
,	402	· ·	1-240-447-11	R <sub>219</sub>	82 Ω // //
1-520-069-11	ME	Meter, tuning	1-244-461-11	R <sub>220</sub>	330 Ω // //
1-507-011-01	J <sub>1</sub>	Jack, auxiliary input	1-240-457-11	R <sub>221</sub>	220 Ω // //
-011-01	J <sub>2</sub>	Jack, detector output	-473-11	R <sub>222</sub>	1ΚΩ " "
-011-01	J <sub>2</sub>	Jack, earphone	-486-11	R <sub>223</sub>	3.6K Ω // //
-126-11	J <sub>4</sub>	Jack, external power input	-483-11	R <sub>224</sub>	2.7ΚΩ // //
1-518-006-05	PL <sub>1</sub>	Lamp, dial	-457-11	R <sub>225</sub>	220 Ω // //
-006-05		Lamp, dial	1-244-465-11	R <sub>301</sub>	470 Ω // //
	PL <sub>2</sub>	Switch, band setting	1-221-637-11	1	50K Ω Adjustable
1-513-314-11	S <sub>201~212</sub>	Switch, dial lamp	1-244-497-11	R <sub>302</sub>	10KΩ ½W Carbon
1-514-078-00	S <sub>401</sub>	Switch, power on/off	-468-11	R <sub>303</sub>	
-191-11	S <sub>402</sub>	·	-466-11 -457-11	R <sub>304</sub>	
1-502-069-11	SP	Speaker (V : total		R <sub>305</sub>	220 Ω // //
1-528-001-00	Batt.	Battery, 6V in total	-523-11	R <sub>306</sub>	120ΚΩ // //
		Tanasistan OSC 403	-487-11	R <sub>307</sub>	3.9KΩ // //
	X <sub>201</sub>	Transistor 2SC403	1-231-016-11	R <sub>308</sub>	470Ω (Built in Encapsulated
	X <sub>202</sub>	// 2SC403	. 644 464 11		Component)
N.	X <sub>203</sub>	// 2SC401	1-244-484-11	R <sub>309</sub>	3KΩ ½8W Carbon
	X <sub>301</sub>	// 2SC404	-497-11	R <sub>310</sub>	10ΚΩ // //
	X <sub>302</sub>	// 2SC404	1-221-632-11	R <sub>311</sub>	200 Ω Adjustable
	X <sub>303</sub>	// 2SB378	1-244-483-11	R <sub>312</sub>	2.7K Ω ½W Carbon
	X <sub>401</sub>	// 2SC402	-475-11	R <sub>313</sub>	1.2ΚΩ // //
	X <sub>402</sub>	// 2SC401	-497-11	R <sub>314</sub>	10ΚΩ // //
	X <sub>403</sub>	// 2SB383	1-201-864-11	R <sub>401</sub>	5.6K $\Omega$ // Composition
	X <sub>404</sub>	// 2SB383	-872-11	R <sub>402</sub>	560 Ω // //
	D <sub>201</sub>	Diode 1T240A	-951-11	R <sub>403</sub>	20 Ω // //
-	D <sub>202</sub>	// 1T23A	-113-11	R <sub>404</sub>	150K Ω // //
	D <sub>301</sub>	// 1T23G	-278-11	R <sub>405</sub>	30 Ω // //
	D <sub>302</sub>	// 1T240A	-277-11	R <sub>406</sub>	300 Ω // //
	Th <sub>401</sub>	Thermistor CS-47	-968-11	R <sub>407</sub>	51 Ω // //

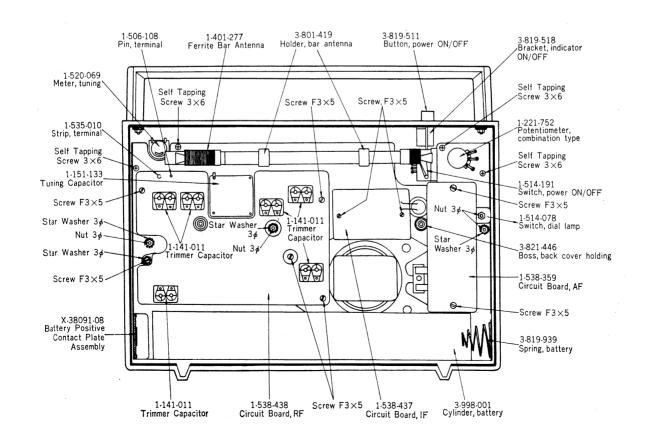
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Part No.	Symbol	Description	Part No.	Symbol	Description
1-201-650-11	R <sub>408</sub>	1.8KΩ ½W Composition	1-101-959-11	C <sub>225</sub>	10pF Ceramic
-401-11	R <sub>409</sub>	2.2Ω ¼W //	1-103-688-11	C226	3600pF Styrol
-859-11	R <sub>410</sub>	360Ω <sup>1</sup> /8Ω //	1-101-882-11	C <sub>227</sub>	51pF Ceramic
-863-11	R <sub>411</sub>	2.2K Ω // //	1-105-411-11	C <sub>228</sub>	0.01μF Mylar
-868-11	R <sub>412</sub>	100ΚΩ // //	-829-12	C <sub>229</sub>	0.0047 <i>μ</i> F <i>//</i>
1-244-477-11	R <sub>413</sub>	1.5K Ω // Carbon	1-101-140-11	C <sub>230</sub>	0.005μF Ceramic
			-142-11	C <sub>231</sub>	0.02 <i>μ</i> F <i>//</i>
		Capacitor	-955-11	C <sub>232</sub>	5PF //
1-151-133-11	C <sub>1-1~3</sub>	Tuning Capacitor, 3 gang	-871-11	C <sub>233</sub>	30PF //
-134-11	C <sub>1-4</sub>	Tuning Capacitor, fine	1-103-610-11	C <sub>234</sub>	240pF Styrol
1-141-011-00	C <sub>2-1~12</sub>	Trimmer Capacitor, 2 unit	1-121-282-11	C <sub>301</sub>	10μF 12V Electrolytic
1-101-959-11	C <sub>201</sub>	10pF Ceramic	-290-11	C <sub>302</sub>	100μF 3V //
-955-11	C <sub>202</sub>	5pF //		C <sub>303</sub>	68pF Ceramic (Attached to CF <sub>302</sub> )
-959-11	C <sub>203</sub>	10pF //	1-121-322-11	C <sub>304</sub>	50μF 6V Electrolytic
-860-11	C <sub>204</sub>	9pF //	1-101-142-11	C <sub>305</sub>	0.02μF Ceramic
-867-11	C <sub>205</sub>	24pF //	-956-11	C <sub>306</sub>	6pF //
-141-11	C <sub>206</sub>	0.01 μF //	1-121-291-11	C <sub>307</sub>	$100 \mu$ F 6V Electrolytic
-141-11	C <sub>207</sub>	0.01 μF <i>//</i>		C <sub>308</sub>	(Built in IFT <sub>301</sub> )
1-121-290-11	C <sub>208</sub>	100μF 3V Electrolytic		C <sub>309</sub>	$0.01 \mu$ F (Built in Encapsulated
1101-955-11	C <sub>209</sub>	5pF Ceramic			Component)
-871-11	C <sub>210</sub>	30pF //		C <sub>310</sub>	$0.01 \mu$ F (Built in Encapsulated ,
-871-11	C <sub>211</sub>	30pF //			Component)
-876-11	C <sub>212</sub>	39pF //	1-103-658-11	C <sub>311</sub>	200pF Styrol
1-105-411-11	C <sub>213</sub>	0.01 μF Mylar	1-121-161-11	C <sub>312</sub>	$500 \mu$ F 6V Electrolytic
1-101-140-11	C <sub>214</sub>	0.005 <i>µ</i> F Ceramic	-282-11	C <sub>401</sub>	10μF 12V //
-142-11	C <sub>215</sub>	0.02 <i>μ</i> F //		C <sub>402</sub>	-deleted
į	C <sub>216</sub>	(Built in IFT <sub>201</sub> )	1-121-315-11	C <sub>403</sub>	100μF 6V Electrolytic
	C <sub>217</sub>	deleted	-287-11	C <sub>404</sub>	50μF 3V <i>//</i>
1-101-141-11	C <sub>218</sub>	0.01μF Ceramic	-315-11	C <sub>405</sub>	100μF 6V //
-955-11	C <sub>219</sub>	5pF //	1-105-419-12	C <sub>406</sub>	0.22μF Mylar
1-103-664-11	C <sub>220</sub>	360pF Styrol	-827-12	C <sub>407</sub>	0.0033 <i>μ</i> F <i>″</i>
1-101-862-11	C <sub>221</sub>	18pF Ceramic	-315-11	C <sub>408</sub>	$100 \mu F$ 6V Electrolytic
-959-11	C <sub>222</sub>	10pF //	-287-11	C <sub>409</sub>	50μF 3V //
1-103-678-11	C <sub>223</sub>	1300pF Styrol	1-127-019-11	C <sub>410</sub>	0.1 μF <i>μ</i>
1-101-864-11	C224	20pF Ceramic	1-105-821-12	C <sub>411</sub>	0.001 μF Mylar

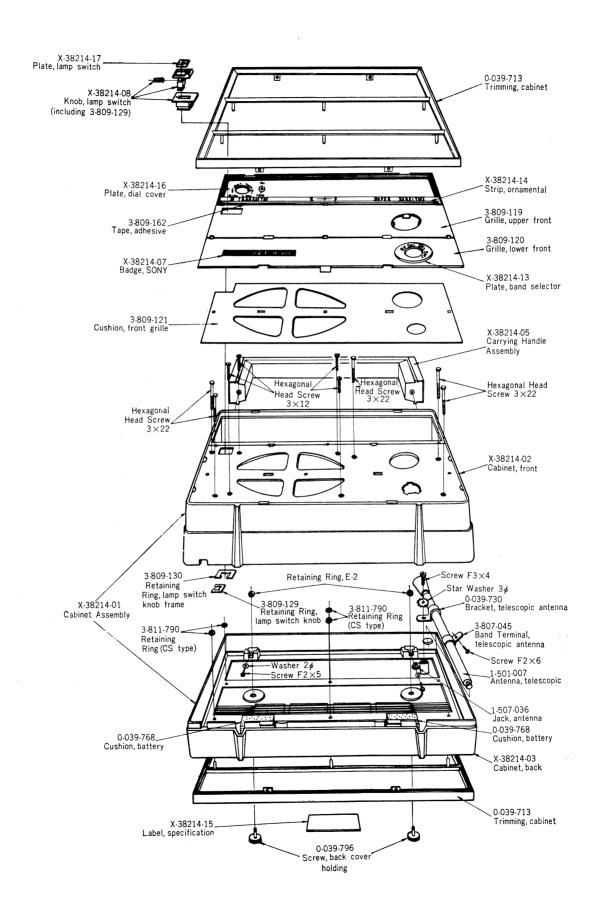
(1)



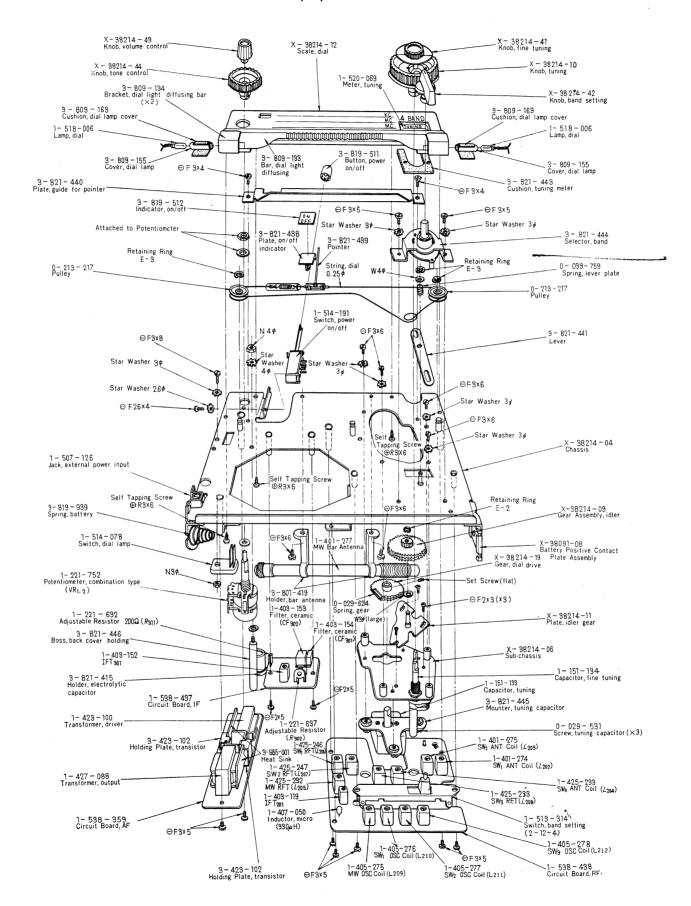
(2)



(3)



(4)



#### SONY CORPORATION

No. 2

### PRODUCTION CHANGE

(Change of Former Service Manual at Page 13)

#### Former Type

Serial No. Up to 14,400

Part No.	Description	Q'ty
X-38214-01-	Cabinet Ass'y	1
X-38214-02-	// front	1
X-38214-03-	// . back	1
3-998-001-01	Battery Cylinder	1
0-039-796-00	Screw, back cover holding	2

#### **New Type**

Serial No. 14,401 and After

Part No.	Description	Q'ty
X-38214-31-1	Cabinet Ass'y	1
X-38214-32-1	<pre>// , front</pre>	1
3-821-471-01	// , back	1
3-998-010-04	Battery Cylinder	1
7-621-661-66	Screw, back cover holding	2

#### **Additional**

Part No.	Description	Q'ty
3-823-043-02	Lid, battery	1
-048-02	Special Nut	3
-049-01	Coil, spring	2
-050-01	Pin, ext. antenna	2 2
-058-03	Knob, lock	1
-059-02	Plate, lock	1
-060-01	Spring, lock	1
7-621-461-46	Screw, machine $+T3\times6$	3
-721-61	" tapping $+R2.6\times5$	3
7-624-106-01	Retaining Ring, E-3	2

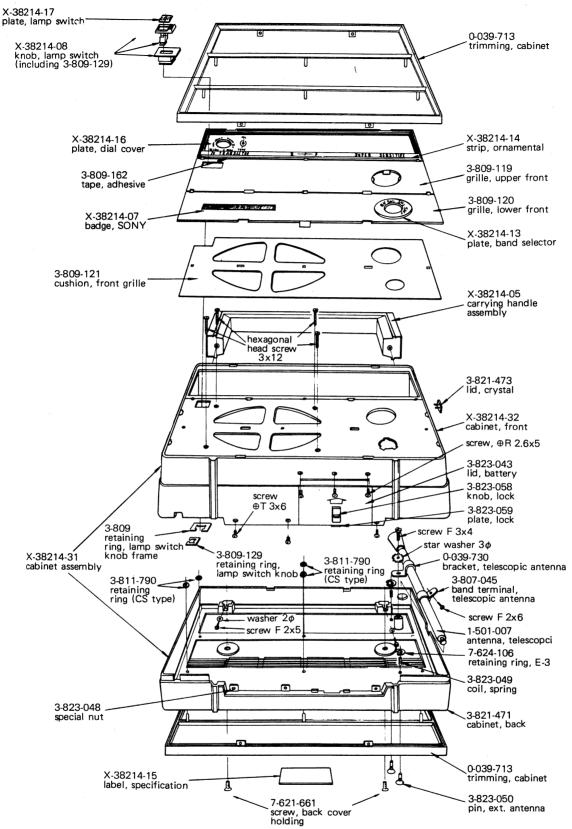
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Part No.	Description	Q'ty
7-621-999-33	Screw, hexagonal 3×22	4
0-039-768-00	Cushion	2
7-624-104-01	Retaining Ring, E-2	2
1-507-036-02	Jack, antenna	1





#### —Cabinet—



#### SONY CORPORATION

## SONY®



## TR Service Bulletin No. 67-2

## Serial No. 117,921 and after

DATE: August 25, 1967

#### SUBJECT:

- 1. Replacement of SW3 OSC Coil.
- 2. Addition of a Ceramic Capacitor.
- 3. Replacement of Tuning Capacitor and Mount for Tuning Capacitor.

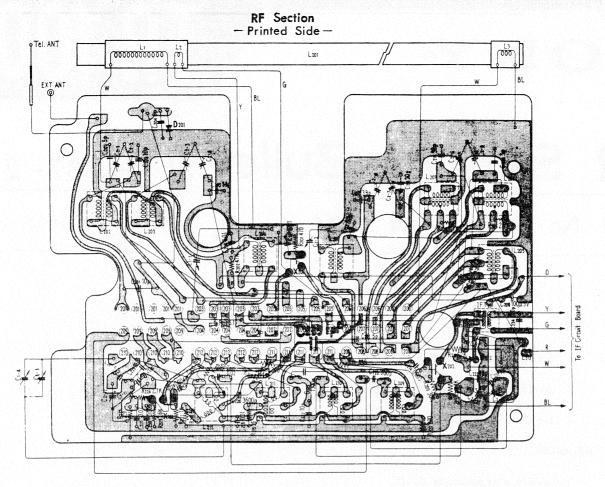
#### REASON:

To avoid a frequency drift.

#### DESCRIPTION:

	Part Number		Remarks	
Parts	Old Type New Type			
SW3 OSC Coil	1-405-278-11	1-405-278-12	Lower Q	
C 2 3 5 Ceramic Capactior	Nil	1-101-951-11	1pF±0.5pF 25WV See Fig.1	
Tuning Capacitor	1-151-133-11	1-151-159-11	Less capacitance fluctuation	
Mount for Tuning Capacitor	3-821-445-03	3-821-445-04	See Fig. 3	

- 1. Mounting and Schematic Diagrams are shown in Fig. 1 (A) and (B).
- 2. The changed positions of the Mount for Tuning Capacitor are shown in Fig.  $_{\mbox{\scriptsize 5}}$



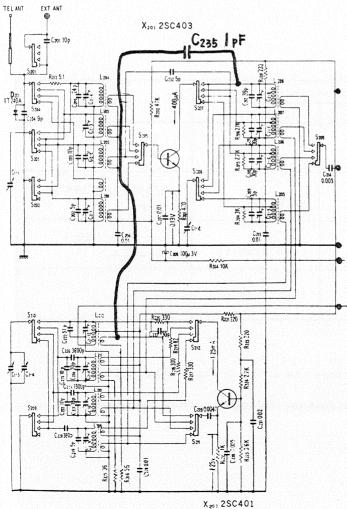


Fig. 1(B) Schematic Diagram

Fig. 1(A) Mounting Diagram

## TR Service Bulletin No. 67-1

Serial No. 118,481 and after

DATE: August 25, 1967

#### SUBJECT:

Replacement of IFT301 and C306.

#### REASON:

To improve the efficiency of adjustment.

#### **DESCRIPTION:**

	Part Nun	nber	
Parts	Old Type	New Type	Remarks
IFT 301	1-403-152-11	1-403-157-11	Pre-Peaking IFT
C 306	1-101-956-11	1-101-957-11	6pF→ 7pF±0.5pF 25WV According to the above change

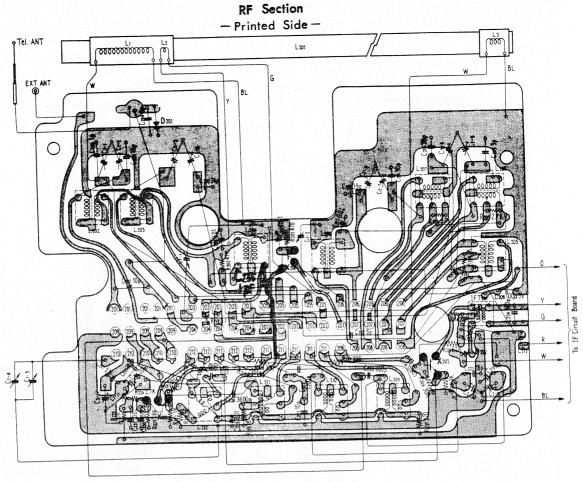
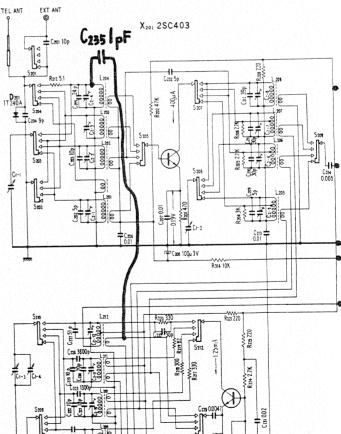


Fig. 2(A) Mounting Diagram



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X203 2SC401

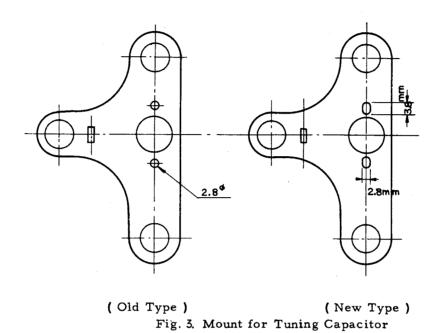
Fig. 2 (B) Schematic Diagram

#### NOTE:

For the same reason, a ceramic capacitor (1pF+0.5pF 25WV, 1-101-951-11) was added between SW3 OSC Coil and SW3 ANT Coil in the sets with serial No. 104, 476 — 118, 481.

Mounting and Schematic Diagrams are shown in Fig. 2(A) and (B).

2. When replacing the Tuning Capacitor of the old type by one of new type, never fail to change the Mount for Tuning Capacitor together.



## TR Service Bulletin No. 67-2

Serial No. 117,921 and after

DATE: August 25, 1967

#### SUBJECT:

- 1. Replacement of SW3 OSC Coil.
- 2. Addition of a Ceramic Capacitor.
- 3. Replacement of Tuning Capacitor and Mount for Tuning Capacitor.

#### REASON:

To avoid a frequency drift.

#### DESCRIPTION:

D	Part Number		Remarks	
Parts	Old Type New Type			
SW3 OSC Coil	1-405-278-11	1-405-278-12	Lower Q	
C 235 Ceramic Capactior	Nil	1-101-951-11	lpF <u>+</u> 0.5pF 25WV See Fig.1	
Tuning Capacitor	1-151-133-11	1-151-159-11	Less capacitance fluctuation	
Mount for Tuning Capacitor	3-821-445-03	3-821-445-04	See Fig. 3	

- 1. Mounting and Schematic Diagrams are shown in Fig. 1 (A) and (B).
- 2. The changed positions of the Mount for Tuning Capacitor are shown in Fig.  $\upbeta$

#### SONY CORPORATION

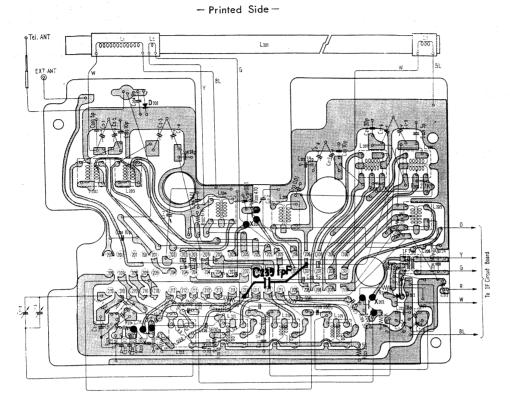


Fig. 1(A) Mounting Diagram

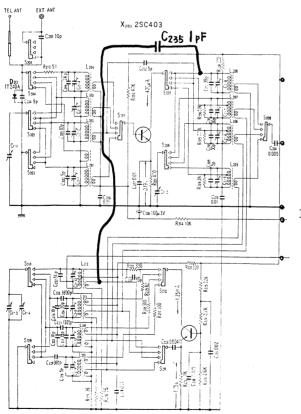


Fig. 1(B) Schematic Diagram

X:03 2SC401

#### NOTE:

1. For the same reason, a ceramic capacitor (  $1pF\pm0.5pF$  25WV, 1-101-951-11 ) was added between SW3 OSC Coil and SW3 ANT Coil in the sets with serial No. 104, 476 — 118, 481.

Mounting and Schematic Diagrams are shown in Fig. 2(A) and (B).

### RF Section — Printed Side —

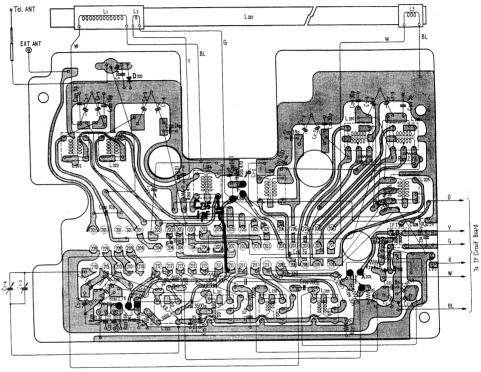


Fig. 2(A) Mounting Diagram

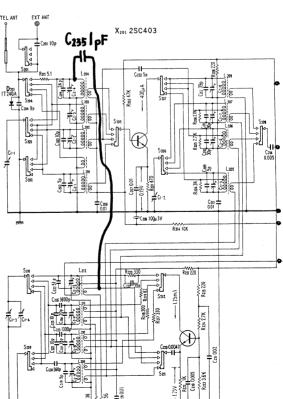
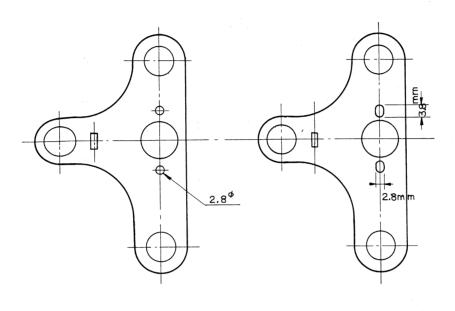


Fig. 2 (B) Schematic Diagram

2. When replacing the Tuning Capacitor of the old type by one of new type, never fail to change the Mount for Tuning Capacitor together.



(Old Type) (New Type)
Fig. 3. Mount for Tuning Capacitor

# TR-1000

No. 2

## PRODUCTION CHANGE

(Change of Former Service Manual at Page 13)

#### Former Type

Serial No. Up to 14,400

Part No.	Description	Q'ty
X-38214-01- X-38214-02- X-38214-03- 3-998-001-01 0-039-796-00	Cabinet Ass'y  // , front  // , back Battery Cylinder Screw, back cover holding	1 1 1 1 2

#### New Type

Serial No. 14,401 and After

Part No.	Description	Q'ty
X-38214-31-1 X-38214-32-1 3-821-471-01	Cabinet Ass'y  // , front  // , back	1 1 1
3-998-010-04 7-621-661-66	Battery Cylinder Screw, back cover holding	1 2

#### **Additional**

Part No.	Description	Q'ty
3-823-043-02	Lid, battery	1
-048-02	Special Nut	3
-049-01	Coil, spring	2 2
-050-01	Pin, ext. antenna	2
-058-03	Knob, lock	1
-059-02	Plate, lock	1
-060-01	Spring, lock	1
7-621-461-46	Screw, machine +T3×6	3
-721-61	" tapping $+R2.6 \times 5$	3
7-624-106-01	Retaining Ring, E-3	2

#### **Deleted**

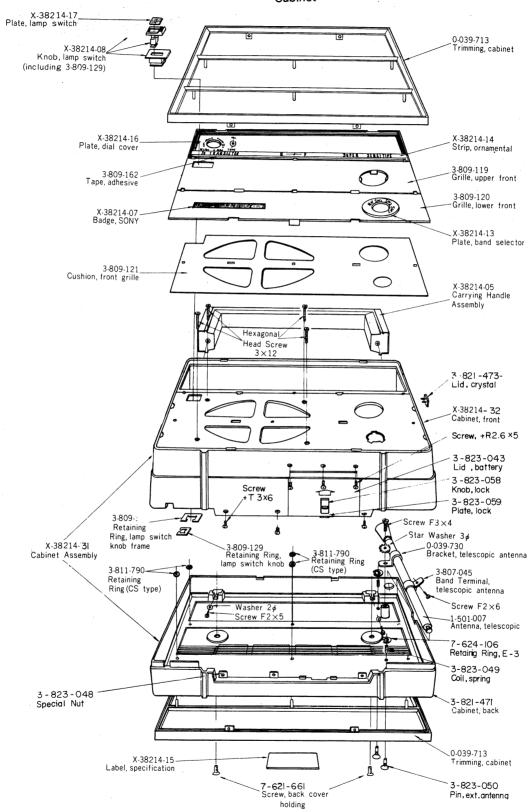
Part No.	Description	Q'ty
7-621-999-33	Screw, hexagonal 3×22	4
0-039-768-00	Cushion	2
7-624-104-01	Retaining Ring, E-2	2
1-507-036-02	Jack, antenna	1



## -1000

#### Exploded Diagram

#### —Cabinet—



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